

electrode 12, a gate electrode 14, a gate dielectric 16, a substrate 18, and the semiconductor

material N,N"-di(n-1H, 1H-perfluooctyl) perylene 3,4,9,10- tetracarboxylic acid diimide, labelled

element 20.

In the claims:

Rewrite the content of claims 1, 2 and 5 as new independent claim 10, and dependent thereon

new claims 11 and 12 as follows then cancel claims 1, 2 and 5.

1 10. In the fabrication of organic thin film field effect semiconductor devices wherein there

2 is an n-channel having source and drain contacts separated by said n-channel,

3 an improvement for producing high electron mobility in said n-channel without treatment

4 of the interface between said contacts and said organic thin film characterized by,

5 said organic thin film being a compound with a N,N"-di(n-1H, 1H-perfluorooctyl)

6 perylene 3,4,9,10- tetracarboxylic acid diimide structure.

1 11. The improvement of claim 10 wherein in said thin film field effect semiconductor

2 devices there is a substrate with a gate electrode that is covered by a gate dielectric ,

3 said source and drain electrodes are positioned in contact with said gate dielectric and
4 aligned with said gate, and, said thin film field effect devices being
5 characterized by having an organic thin film semiconductor member of a compound having an
6 N,N"-di(n-1H, 1H-perfluorooctyl) perylene 3,4,9,10- tetracarboxylic acid diimide structure
6 extending over said source and drain electrodes and in contact with said gate dielectric.

1 12. The improvement of claim 10 wherein in said thin film field effect semiconductor
2 devices there is a substrate with a gate electrode that is covered by a gate dielectric ,
3 said devices being characterized by having an organic thin film semiconductor member of a
4 compound having an N,N"-di(n-1H, 1H-perfluorooctyl) perylene 3,4,9,10- tetracarboxylic
5 acid diimide structure positioned in contact with and extending over said gate dielectric, and,
6 source and drain electrodes positioned in contact with said organic thin film semiconductor
7 member and aligned with said gate.
